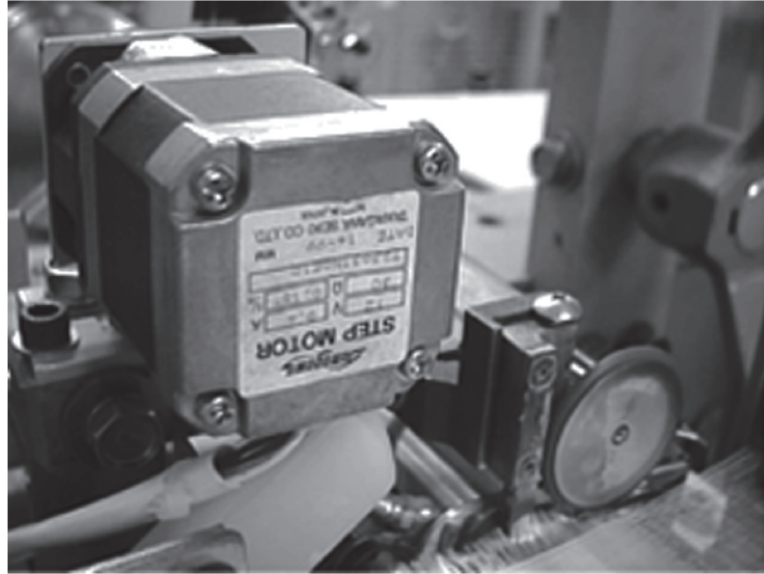


**Section 5.15**  
**LH Clamp Roller (Option)**

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The LH clamp roller holds the beaten-up weft pick by pick to reinforce the selvage and prevent the selvage yarn from getting loose.



## **5.15.1 Operational Description of Loom and LH Clamp Roller**

### **[1] During Automatic Operation or Forward/Reverse Inching**

The clamp roller runs in the forward or reverse direction, depending on the preset parameter, by one pick according to the timing of front signal detection by the loom encoder.

### **[2] During TAPO Process**

- (1) In case of misspicking, a pick of weft is released from the drum and reserved in the catcher duct.
- (2) The loom stops once. Then, it runs in the reverse direction by the preset reverse rotation angle at misspicking (for TAPO) for the previous pick. The clamp roller also runs in the reverse direction (by the preset automatic reverse amount at misspicking).
- (3) The weft reserved in the catcher duct and a spare roll of EDP are released (by air jet from the main/sub stretch nozzles).
- (4) After each valve stops injection, the electromagnetic pin is closed to wind a spare roll.
- (5) The loom moves to the front and, after cutting the weft, runs in the reverse direction to the reverse rotation angle at misspicking (for TAPO).
- (6) The sub end stretch nozzle injects air to release the weft between warps.
- (7) The presence of the weft is confirmed by the WFI feeler. The sub end stretch nozzle continues to inject air and the clamp roller to run in the reverse direction until no weft is detected.
- (8) If the weft still remains after the sub end stretch nozzle injects air and the clamp roller runs in the reverse direction five times each, it is considered as a TAPO process error and the loom stops.

## 5.15.2 Functions and OperationMethod

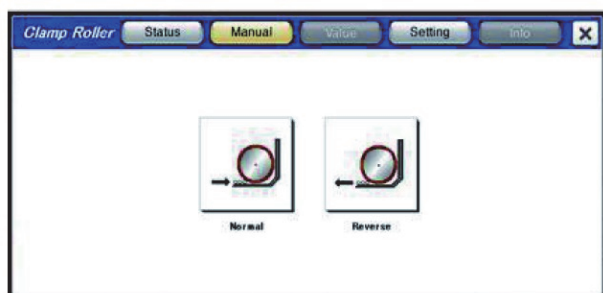
### [1] Function panel settings



By touching [Map] - [Clamp] - [Setting], the LH clamp roller setting screen appears.

- (1) Set the weft density. The setting range for the standard specification is 15 to 120 rolls per inch. (Default: 47)
- (2) Set the rotation amount rate. The setting range is 0.6 to 1.4. (Default: 1.0)  
This is used to compensate the rotation per pick calculated from the density during auto operation. The larger the value, the larger the rotation. Compensation is not performed when inching.
- (3) Set the auto reverse at misspick. The setting range is 0 to 10. (Default: 0)  
This sets the automatic reversal amount in number of picks before the first TAPO processing when a weft misspick occurs. Automatic reversal is not performed when set to 0.
- (4) Set the rotation direction.  
**NOTE:** This refers not to the clamp roller roller direction, but to the drive motor roller direction, and differs depending on the machine specification. This is normally left at the default setting.  
(4-color spec.: normal, 1, 2-color spec.: reverse)  
Change if the clamp roller rotation direction becomes the opposite to that of the fabric direction following modifications.

## [2] Manual operation



By touching [Manual], the screen on the left appears.

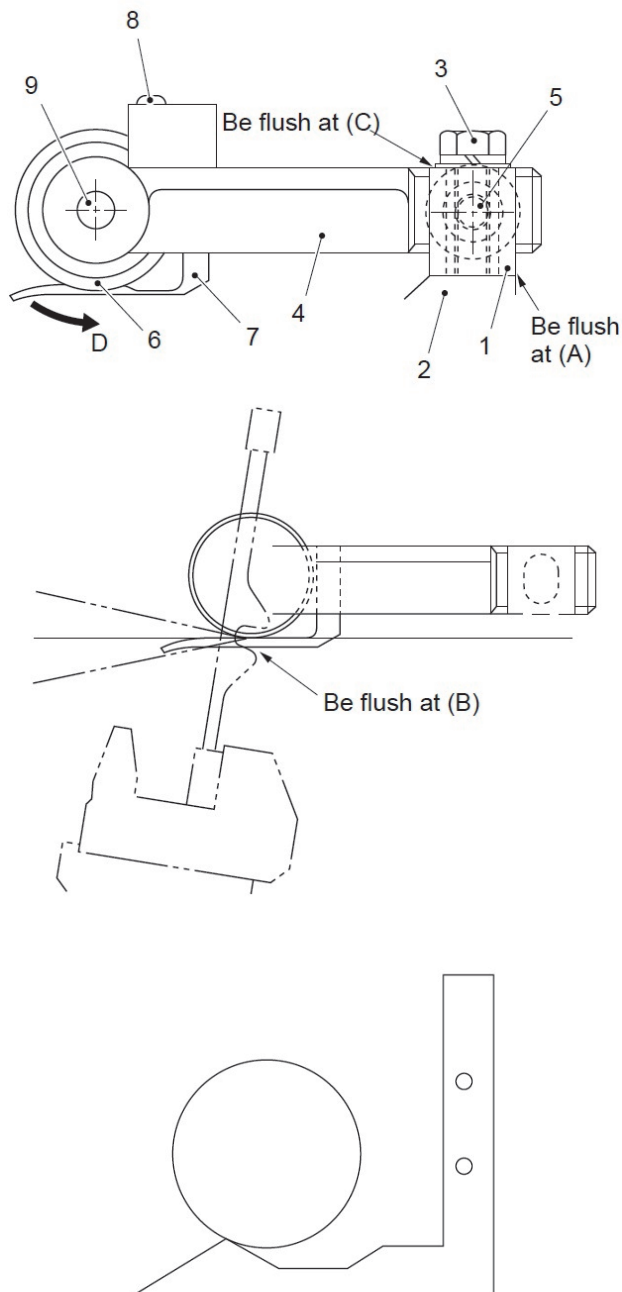
- Press the [Normal] or [Reverse] button once to rotate one pick in the normal or reverse direction.

## [3] Saving data

The following data can be saved.

- Density and density units
- Rotation amount rate
- Auto reversal amount at misspick

## 5.15.3 Adjustment of LH Clamp Roller



### (1) Longitudinal positioning

Loosen the bolt **3**. Make the cutter bracket **2** and the block clamp roller holder **1** flush with each other **(A)**. After weaving new fabric, roughly align the beating point with the lower end of stroke of the clamp roller **6 (B)**. Check that the weft is firmly held by the clamp roller **6** and the clamp catch **7**.

### (2) Vertical positioning

Loosen the bolt **5**. Make the tops of block clamp roller holder **1** and the clamp roller holder **4** flush with each other **(C)**. Check that weft comes to the middle point between the clamp roller **6** and the clamp catch **7** after weaving new fabric.

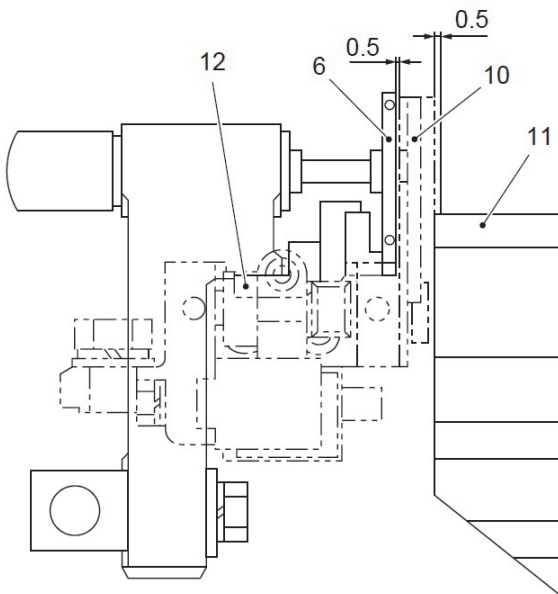
### (3) Contact pressure between clamp roller and clamp catch

Adjust the clamp roller **6** and the clamp catch **7** with the adjustment screw **8** so that they will be in slight contact with each other and the clamp roller shaft **9** will smoothly rotate in direction **D**.

In addition, adjust the clamp roller **6** and the clamp catch **7** with the gripper clamp catch **12** to eliminate the phase difference between them.

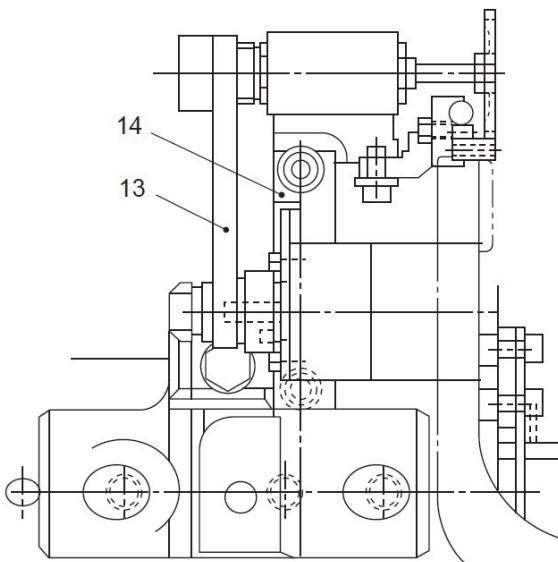
**NOTE:** Check to see that the front of the clamp catch **7** first comes into contact with the clamp roller **6**.

### 5.15.3 Adjustment of LH Clamp Roller



#### (4) Crosswise positioning

Adjust the gap between the LH cutter **10** and the clamp roller **6** to 0.5 mm. Also adjust the gap between the LH cutter **10** and the fell support **11** to 0.5 mm.



#### (5) Timing belt tension

Note that excessive tightening of the belt **13** may tear the belt in the earlier stage.

Reference value: 10 - 24 N (1 - 2.5 kgf)

When determining the belt tension, secure the motor bracket **14** while pushing to the right as viewed from the cloth fell to center the motor shaft and clamp roller shaft.

**NOTE:** Check to see that the clamp roller holder does not come into contact with the main nozzle block.